Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte DAVID LARS EHNEBUSKE, BARBARA JANE ALSPACH MCKEE and ISABELLE MARIE CATHERINE ROUVELLOU

Appeal No. 2004-0742
Application No. 09/204,973

ON BRIEF

Before KRASS, OWENS, and BLANKENSHIP, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal is from the final rejection of claims 1, 12-28, 31-39, 41-47, 51, 52, 55-63, 65-69, 71-76, 79-87, 89-93 and 95-98. As of the final rejection, claims 29, 30, 40, 53, 54, 64, 77, 78 and 88 were canceled, and claims 2-11, 48-50, 70 and 94 were allowed. In the examiner's answer claims 12-15, 23-28, 31-35, 43-46, 51, 52, 55-59, 67-69, 72-76, 79-83, 91-93 and 96-98 are allowed. Hence, the claims before us are claims 1, 16-22, 36-39, 41, 42, 47, 60-63, 65, 66, 71, 84-87, 89, 90, and 95.

THE INVENTION

The appellants claim a process, system and program for applying a set of rules. Claim 16, which claims the method, is illustrative:

16. A computer implemented process for applying a set of rules comprising:
(a) defining an object;
(b) defining at least one method in the object;
(c) defining at least one control point in the at least one method;
(d) defining rules to the at least one control point on basis the object's class name, method, name, and position of the at least one control point in the method.

THE REFERENCE

James Martin, *Principles of Object-Oriented Analysis and Design* 1-412 (PTR Prentice Hall 1993).

THE REJECTION

Claims 1, 16-22, 36-39, 41, 42, 47, 60-63, 65, 66, 71, 84-87, 89, 90, and 95 stand rejected under 35 U.S.C. § 102(a) as being anticipated by Martin.[1]

OPINION

We affirm the rejection of claims 16-18 and 22, and reverse the rejection of claims 1, 19-21, 36-39, 41, 42, 47, 60-63, 65, 66, 71, 84-87, 89, 90, and 95.

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[1] Our consideration of Martin is based upon Martin's book obtained from an examiner by one of our paralegals. We have placed a copy of chapters 9 and 10 and pages 163, 164, 168, 173 and 394 of Martin's book in the file.

Claim 1

Claim 1 requires "placing a pre-method control point before logic of a method and post-method control point after the logic of the method".

The examiner argues that the appellants' pre-method control point and post-method control point are met by, respectively, Martin's operation precondition and operation postcondition (answer, page 6).

The appellants indicate that their control points are points for attaching and running rules (specification, page 1, lines 29-30). Martin's preconditions "are those conditions that must be true before an operation can take place", and the post conditions "are those conditions that must hold when the operation is completed" (page 115). The examiner has not established that the preconditions and postconditions are points for attaching and running rules and, therefore, has not established that the preconditions and postconditions correspond, respectively, to the appellants' pre-method control point and post-method control point.

The appellants' claim 1 also requires "determining if the encountered control point is active".

Martin discloses control conditions, which can be "and" and "or" conditions, that must be checked prior to invoking an

operation, and can act as synchronization points for parallel processing, i.e., can ensure that a set of events is complete before proceeding with the operation (pages 122 and 124). Martin shows a control condition as a point at which trigger rules are attached and teaches that the control condition relates to the trigger rules and often is designed to achieve correctness of a precondition (page 142). Thus, Martin indicates that a control condition is a point at which rules are attached and run and, therefore, corresponds to the appellants' control point.

For the rules to run at the point of the control condition, that point necessarily must be active. The examiner, however, has not established that Martin discloses a step of determining whether an encountered control condition point is active. The examiner argues that Martin's disclosure of an IF structure is a disclosure of determining if an encountered control point is active (answer, page 7). The IF structure, however, merely determines whether the control condition is met (page 122). It does not determine whether the control condition point is active.

For the above reasons we find that the examiner has not carried the burden of establishing a *prima facie* case of anticipation of the process claimed in the appellants' claim 1. Hence, we reverse the rejection of that claim.

Claims 16-22

Martin discloses a Fire Missile operation that can occur only if multiple conditions are obeyed (page 121). The missile firer is an object. The method of firing the missile is a method in the object. The control condition point shown in Martin's missile firing event diagram (page 121) is a control point in the method. The control conditions, i.e., "Firing Instructions received", "Missile correctly armed", "Valid Security Code received" and "Lock activated" (page 122) are rules (page 144). These rules necessarily must be defined on the basis of the object's class name (firer), method (missile firing), name (missile firer), and position of the control condition point in the method (the point at which the missile is fired). The reason is that rules that are not defined on those bases (e.g., rules for constructing the missile firer or operating an automatic teller machine) would not be meaningful at a missile firing control condition point.

Thus, we are not convinced by the appellants' argument that Martin says nothing regarding defining rules for at least one control point based on an object's class name, method name, and position of the at least one control point in the method (brief, page 22; reply brief, page 6).

We therefore find that the process claimed in the appellants' claim 16 is anticipated by Martin. Accordingly, we affirm the rejection of that claim.

As discussed above, to run the rules Martin's control condition point necessarily must be active, thus having undergone a step of activating. Hence, we affirm the rejection of claim 17 and claim 22 that stands or falls therewith.

As for claim 18, Martin discloses encountering the missile firing control condition point, running the rules associated with that control condition point, and affecting behavior of the object (firing the missile) based on running those rules. Accordingly, we affirm the rejection of claim 18.

Claim 19, which depends from claim 18, requires an additional step (step h in addition to steps a-g of claims 16 and 18) of associating different rules, i.e., rules in addition to those recited in claims 16 and 18, to a control point. The examiner points out that Martin discloses events triggered by a clock time (pages 117 and 394), and argues that this is a disclosure of different rules based on the time of day affecting flow control/behavior (answer, page 10). For the appellants' claimed invention to be anticipated by Martin, that reference must lead one of ordinary skill in the art to a process which falls within the scope of the appellants' claim "without *any* need

for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference." *In re Arkley*, 455 F.2d 586, 587, 172 USPQ 524, 526 (CCPA 1972). The examiner has not explained how Martin's disclosure of events triggered by clock time can be combined with Martin's other disclosures, without such picking and choosing, to arrive at a process that includes the limitations of both the appellants' claim 19 and claim 16 from which it depends. Consequently, we reverse the rejection of claim 19.

Claim 20, which depends from claim 18, requires defining another control point. The examiner argues (answer, pages 10-11):

> (Examiner Interpretation of "defining another control point" the meaning could be at design time or runtime. Design time would involve the interaction with the OO-CASE tool as on **Martin**, page 162, Run time would mean the behavior changes value such as attribute which influence the path the control flow takes. This is the point of programming. The ability to model a problem domain and execute code that process information that reflects the modeled problem - Flow Control as determined by the running of the program such as **Martin**, page 163).

The examiner apparently is arguing that additional control points could be defined. The examiner, however, has not pointed out where Martin discloses a process having the limitations of the appellants' claim 18 and, additionally, a step of defining another control point. Hence, we reverse the rejection of

claim 20.

Claim 21, which depends from claim 18, requires associating rules to a second control point. The examiner argues (answer, page 11): "(**Martin**, page 163, Multiple control points defined)." The relied-upon page of Martin shows an event diagram having three condition control points. The examiner, however, has not explained how Martin would have led one of ordinary skill in the art to combine that disclosure with any other disclosure by Martin such that a process is arrived at having each limitation in claim 21 and claim 18 from which it depends, without picking, choosing, and combining various disclosures not directly related to each other by the teachings of Martin. *See Arkley*, 455 F.2d at 587, 172 USPQ at 526. Therefore, the rejection of claim 21 is reversed.

Claims 36-39, 41, 60-63, 65, 84-87 and 89

Claim 36 requires creating a rule, associating the rule with an object class, associating the rule with a method within the object class, associating the rule with an occurrence of a control point within the method, and associating the rule with another method within the object class. Claims 60 and 84 require, respectively, means and instructions for carrying out those steps.

The examiner argues (answer, page 14):

> **Martin** anticipates a computer implemented process for defining a rule comprising: creating the rule (**Martin**, page 167, Rule Editor);associating the rule with an object class (**Martin**, page 167, Figure 11.14); associating the rule with a method within the object class (Martin, page 173, operations are methods); and associating the rule with an occurrence of a control point within the method and associating the rule with another method within the object class. (**Martin**, page 168, Figure 11.16).

Martin's figure 11.16 discloses a rule associated with a control condition point and method for scheduling a room, but does not disclose associating the rule with another method. Martin defines the term "operation" on page 173 relied upon by the examiner, but does not disclose any method associated with the rule set forth in figure 11.16 on page 168. Accordingly, we reverse the rejection of claim 36 and its dependent claims 37-39 and 41, claim 60 and its dependent claims 61-63 and 65, and claim 84 and its dependent claims 85-87 and 89.

Claim 42, 66 and 90

Claim 42 claims a process including a step of determining if a control point is active. Claim 66 claims a system including means for determining if a control point is active. Claim 90 claims a program including instructions for determining if a control point is active.

The examiner asserts that the claimed process, system and program are anticipated by Martin (answer, pages 15-16, 20 and 25-26), but the examiner does not point out any disclosure in Martin of a step, means or instruction for determining if a control point is active. Therefore, we reverse the rejection of claims 42, 66 and 90.

Claims 47, 71 and 95

Claim 47 claims a process including the steps of encountering first and second control points associated with a method, and determining if the first and second control points are active. Claim 71 claims a system including means for carrying out those steps, and claim 95 claims a program including instructions for carrying out those steps. The examiner argues that Martin discloses "determining if the first control point is active (the running of code from claims 1 and 2 and implementations such as page 164 Fig. 11.10)" (answer, page 17). The examiner has not pointed out, and it is not apparent, where Martin's figure 11.10 discloses determining if a control point is active. Consequently, we reverse the rejection of claims 47, 71 and 95.

DECISION

The rejection of claims 1, 16-22, 36-39, 41, 42, 47, 60-63, 65, 66, 71, 84-87, 89, 90, and 95 under 35 U.S.C. § 102(a) over

Martin is affirmed as to claims 16-18 and 22 and reversed as to claims 1, 19-21, 36-39, 41, 42, 47, 60-63, 65, 66, 71, 84-87, 89, 90, and 95.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

Errol A. Krass)
Administrative Patent Judge)
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Terry J. Owens) BOARD OF PATENT
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